BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Chokkanahalli And Thirumenahalli Surrounding area in ward No.06 Kogilu

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth B1	Breadth B2	Breadth Avg B	Depth (m)	Quantity	Rate in RS.	Amount in RS.	Remarks
Item No. 01		Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. and as per the direction of Engineer in charge of the work.											
			Cum										
		Vide Total executed Quantity from premeasuremet Page no. 1								312.67			
										Total Executed Quantity	**312.67**		
										Tender Quantity	**313.12**		
										Now To Be Paid Quantity	**312.67**	**214.81**	**67164.64**
Item No. 02		Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. and as per the direction of Engineer in charge of the work.											
			Cum										
		Vide Total executed Quantity from premeasuremet Page no. 2								52.13			
										Total Executed Quantity	**52.13**		
										Tender Quantity	**52.05**		
										Now To Be Paid Quantity	**52.13**		
										Quantity Limited To	**52.05**	**6414.26**	**333862.23**
Item no.03		Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately) and as per the direction of Engineer in charge of the work.											
Measurements Taken On													
		Thirumenahalli											
		Kere Road											
		LHS											
0	15		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
15	30		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
30	45		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
45	60		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
60	75		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
75	90		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
90	105		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
105	120		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
120	135		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
135	150		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
150	165		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
165	180		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
180	195		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
195	210		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
210	225		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
225	240		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
240	243		Cum	1	3.00	0.90	0.90	0.90	0.15	0.41			
243	251	No work	Cum	0	0.00	0.00	0.00	0.00	0.00	0.00			
250.5	255		Cum	1	4.50	0.90	0.90	0.90	0.15	0.61			
255	257	No work	Cum	0	0.00	0.00	0.00	0.00	0.00	0.00			
257	272		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
272	275		Cum	1	2.70	0.90	0.90	0.90	0.15	0.36			
274.7	282	No work	Cum	0	0.00	0.00	0.00	0.00	0.00	0.00			
282.4	295		Cum	1	12.90	0.90	0.90	0.90	0.15	1.74			

Contractor

Assistant Engineer

Assistant Executive Engineer

Scanned by CamScanner

MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth B1	Breadth B2	Breadth Avg B	Depth (m)	Quantity	Rate in RS.	Amount in RS.	Remarks
		Cross Road											
0	15		Cum	1	15.00	0.90	0.90	0.90	0.15	2.03			
15	28.6		Cum	1	13.60	0.90	0.90	0.90	0.15	1.84			
		Side Wall Thirumenahalli Kere Road LHS											
0	15		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
15	30		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
30	45		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
45	60		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
60	75		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
75	90		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
90	105		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
105	120		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
120	135		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
135	150		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
150	165		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
165	180		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
180	195		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
195	210		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
210	225		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
225	240		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
240	243		Cum	2	3.00	0.15	0.15	0.15	0.60	0.54			
243	251	No work	Cum	0	0.00	0.15	0.15	0.15	0.60	0.00			
250.5	255		Cum	2	4.50	0.15	0.15	0.15	0.60	0.81			
255	257	No work	Cum	0	0.00	0.15	0.15	0.15	0.60	0.00			
257	272		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
272	275		Cum	2	2.70	0.15	0.15	0.15	0.60	0.49			
274.7	282	No work	Cum	0	0.00	0.15	0.15	0.15	0.60	0.00			
282.4	295		Cum	2	12.90	0.15	0.15	0.15	0.60	2.32			
		Cross Road											
0	15		Cum	2	15.00	0.15	0.15	0.15	0.60	2.70			
15	28.6		Cum	2	13.60	0.15	0.15	0.15	0.60	2.45			
									Sub Total	96.71			
		Culvert thirumenahalli Kere Road											
			Cum	1	6.80	1.20	1.20	1.20	0.20	1.63			
		Side Wall thirumenahalli Kere Road											
			Cum	2	6.80	0.23	0.23	0.23	0.60	1.88			
									Sub Total	3.51			
									Total Executed Quantity	100.22			
									Tender Quantity	100.29			
									Now To Be Paid Quantity	100.22	7237.00	725292.14	
Item no.04		Supplying, Fitting and Placing TMT Fe550 bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. and as per the direction of Engineer in charge of the work.											
			Tonne										
		Vide Total executed Quantity from premeasuremet Page no. 3								6.17			
									Total Executed Quantity	6.17			
									Tender Quantity	6.18			
									Now To Be Paid Quantity	6.17	106446.21	656773.12	

Contractor

Assistant Engineer

Assistant Executive Engineer

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MEASUREMENT SHEET
FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth B1	Breadth B2	Breadth Avg B	Depth (m)	Quantity	Rate in RS.	Amount in RS.	Remarks
Item no.05		Providing and Fixing pre cast covering Slab 100mm thick made out of CC , Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete and as per the direction of Engineer in charge of the work.											
Measurements Taken On :													
		Thirumenahalli											
		Kere Road											
		LHS											
0	15		Sqm	1	15.00	0.90	0.90	0.90		13.50			
15	30		Sqm	1	15.00	0.90	0.90	0.90		13.50			
30	45		Sqm	1	15.00	0.90	0.90	0.90		13.50			
45	60		Sqm	1	15.00	0.90	0.90	0.90		13.50			
60	75		Sqm	1	15.00	0.90	0.90	0.90		13.50			
75	90		Sqm	1	15.00	0.90	0.90	0.90		13.50			
90	105		Sqm	1	15.00	0.90	0.90	0.90		13.50			
105	120		Sqm	1	15.00	0.90	0.90	0.90		13.50			
120	135		Sqm	1	15.00	0.90	0.90	0.90		13.50			
135	150		Sqm	1	15.00	0.90	0.90	0.90		13.50			
150	165		Sqm	1	15.00	0.90	0.90	0.90		13.50			
165	180		Sqm	1	15.00	0.90	0.90	0.90		13.50			
180	195		Sqm	1	15.00	0.90	0.90	0.90		13.50			
195	210		Sqm	1	15.00	0.90	0.90	0.90		13.50			
210	225		Sqm	1	15.00	0.90	0.90	0.90		13.50			
225	240		Sqm	1	15.00	0.90	0.90	0.90		13.50			
240	243		Sqm	1	3.00	0.90	0.90	0.90		2.70			
243	251	No work	Sqm	0	0.00	0.00	0.00	0.00		0.00			
250.5	255		Sqm	1	4.50	0.90	0.90	0.90		4.05			
255	257	No work	Sqm	0	0.00	0.00	0.00	0.00		0.00			
257	272		Sqm	1	15.00	0.90	0.90	0.90		13.50			
272	275		Sqm	1	2.70	0.90	0.90	0.90		2.43			
274.7	282	No work	Sqm	0	0.00	0.00	0.00	0.00		0.00			
282.4	295		Sqm	1	12.90	0.90	0.90	0.90		11.61			
		Cross Road											
0	15		Sqm	1	15.00	0.90	0.90	0.90		13.50			
15	28.6		Sqm	1	13.60	0.90	0.90	0.90		12.24			
										Total Executed Quantity	276.03		
										Tender Quantity	270.63		
										Now To Be Paid Quantity	276.03		
										Quantity Limited To	270.63	2175.39	588725.80
Item no.06		Providing and Fixing pre cast covering Slab 230mm thick made out of CC , Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete and as per the direction of Engineer in charge of the work.											
Measurements Taken On :													
		thirumenahalli											
		Kere Road											
			Sqm	1	6.80	1.20	1.20	1.20		8.16			
		Missing Slab	Sqm	8	1.20	0.60	0.60	0.60		5.76			
										Total Executed Quantity	13.92		
										Tender Quantity	13.92		
										Now To Be Paid Quantity	13.92	5288.35	73613.83
Item no.07		Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work. In all kinds of soils upto 300 mm depth.											
			Cum										
		Vide Total executed Quantity from premeasuremet Page no. 4								346.43			
										Total Executed Quantity	346.43		
										Tender Quantity	324.76		

Contractor

Assistant Executive Engineer

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MEASUREMENT SHEET

FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth B1	Breadth B2	Breadth Avg B	Depth (m)	Quantity	Rate in RS.	Amount in RS.	Remarks
									Now To Be Paid Quantity	346.43			
									Quantity Limited To	324.76	75.07	24379.73	
Item no.08		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density MORTH Specification											
			Cum										
		Vide Total executed Quantity from premeasuremet Page no. 5								346.43			
									Total Executed Quantity	346.43			
									Tender Quantity	324.76			
									Now To Be Paid Quantity	346.43			
									Quantity Limited To	324.76	2764.81	897899.70	
Item no.09		Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means MORTH Specification											
			Sqm										
		Vide Total executed Quantity from premeasuremet Page no. 6								1732.17			
									Total Executed Quantity	1732.17			
									Tender Quantity	1623.78			
									Now To Be Paid Quantity	1732.17			
									Quantity Limited To	1623.78	48.51	78769.57	
Item no.10		Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification											
			Cum										
		Vide Total executed Quantity from premeasuremet Page no. 7								86.65			
									Total Executed Quantity	86.65			
									Tender Quantity	81.19			
									Now To Be Paid Quantity	86.65			
									Quantity Limited To	81.19	10554.54	856923.10	
Item no.11		Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical broom MORTH Specification											
			Sqm										
		Vide Total executed Quantity from premeasuremet Page no. 8								1732.17			
									Total Executed Quantity	1732.17			
									Tender Quantity	1623.78			
									Now To Be Paid Quantity	1732.17			
									Quantity Limited To	1623.78	16.17	26256.52	
Item no.12		Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 percent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade,level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification											
Measurements Taken On :													
		Thirumenahalli Kere Road											
0	15		Cum	1	15.00	5.70	5.85	5.78	0.04	3.47			
15	30		Cum	1	15.00	5.85	5.85	5.85	0.04	3.51			
30	45		Cum	1	15.00	5.85	5.95	5.90	0.04	3.54			
45	60		Cum	1	15.00	5.95	6.05	6.00	0.04	3.60			
60	75		Cum	1	15.00	6.05	6.05	6.05	0.04	3.63			
75	90		Cum	1	15.00	6.05	5.90	5.98	0.04	3.59			
90	105		Cum	1	15.00	5.90	6.05	5.98	0.04	3.59			
105	120		Cum	1	15.00	6.05	6.10	6.08	0.04	3.65			
120	135		Cum	1	15.00	6.10	6.10	6.10	0.04	3.66			
135	150		Cum	1	15.00	6.10	6.15	6.13	0.04	3.68			
150	165		Cum	1	15.00	6.15	6.15	6.15	0.04	3.69			
165	180		Cum	1	15.00	6.15	6.30	6.23	0.04	3.74			
180	195		Cum	1	15.00	6.30	6.00	6.15	0.04	3.69			
195	211		Cum	1	16.20	6.00	5.20	5.60	0.04	3.63			

30.67

Contractor

Assistant Engineer

Executive Engineer

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MEASUREMENT SHEET
FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth B1	Breadth B2	Breadth Avg B	Depth (m)	Quantity	Rate in RS.	Amount in RS.	Remarks
211.2	225		Cum	1	13.80	5.75	5.75	5.75	0.04	3.17			
225	240		Cum	1	15.00	5.75	5.70	5.73	0.04	3.44			
240	255		Cum	1	15.00	5.70	5.70	5.70	0.04	3.42			
255	270		Cum	1	15.00	5.70	5.80	5.75	0.04	3.45			
270	274		Cum	1	4.00	5.80	5.85	5.83	0.04	0.93			
274	275	Culvert	Cum	1	0.00	0.00	0.00	0.00	0.04	0.00			
275.3	285		Cum	1	9.70	6.35	5.80	6.08	0.04	2.36			
285	293		Cum	1	8.00	5.80	5.80	5.80	0.04	1.86	18.63		
										Total Executed Quantity	**69.30**		
										Tender Quantity	**64.95**		
										Now To Be Paid Quantity	**69.30**		
										Quantity Limited To	**64.95**	**12254.54**	**795932.37**

Item no.13 Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. MORTH Specification

Measurements Taken On : Thirumenahalli Kere Road

0	15		Sqm	2	15.00	0.10	0.10	0.10		3.00			
15	30		Sqm	2	15.00	0.10	0.10	0.10		3.00			
30	45		Sqm	2	15.00	0.10	0.10	0.10		3.00			
45	60		Sqm	2	15.00	0.10	0.10	0.10		3.00			
60	75		Sqm	2	15.00	0.10	0.10	0.10		3.00			
75	90		Sqm	2	15.00	0.10	0.10	0.10		3.00			
90	105		Sqm	2	15.00	0.10	0.10	0.10		3.00			
105	120		Sqm	2	15.00	0.10	0.10	0.10		3.00			
120	135		Sqm	2	15.00	0.10	0.10	0.10		3.00			
135	150		Sqm	2	15.00	0.10	0.10	0.10		3.00			
150	165		Sqm	2	15.00	0.10	0.10	0.10		3.00			
165	180		Sqm	2	15.00	0.10	0.10	0.10		3.00			
180	195		Sqm	2	15.00	0.10	0.10	0.10		3.00			
195	211		Sqm	2	16.20	0.10	0.10	0.10		3.24			
211.2	225		Sqm	2	13.80	0.10	0.10	0.10		2.76			
225	240		Sqm	2	15.00	0.10	0.10	0.10		3.00			
240	255		Sqm	2	15.00	0.10	0.10	0.10		3.00			
255	270		Sqm	2	15.00	0.10	0.10	0.10		3.00			
270	274		Sqm	2	4.00	0.10	0.10	0.10		0.80			
274	275	Culvert	Sqm	2	0.00	0.10	0.10	0.10		0.00			
275.3	285		Sqm	2	9.70	0.10	0.10	0.10		1.94			
285	293		Sqm	2	8.00	0.10	0.10	0.10		1.60			
										Total Executed Quantity	**58.34**		
										Tender Quantity	**60.14**		
										Now To Be Paid Quantity	**58.34**	**552.04**	**32206.01**

Item no.14 Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 5.5 m3) and as per the direction of Engineer in charge of the work.

			Tonne										
		Vide Total executed Quantity from premeasuremet Page no. 9								659.10			
										Total Executed Quantity	**659.10**		
										Tender Quantity	**637.88**		
										Now To Be Paid Quantity	**659.10**		
										Quantity Limited To	**637.88**	**136.28**	**86930.29**

Contractor

Assistant Engineer

Assistant Executive Engineer

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MEASUREMENT SHEET
FIRST AND FINAL BILL

Chainage From	Chainage To	Description of Item	Unit	No	Length (m)	Breadth B1	Breadth B2	Breadth Avg B	Depth (m)	Quantity	Rate in RS.	Amount in RS.	Remarks
Item no.15		Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km and as per the direction of Engineer in charge of the work.											
			Tonne										
		Vide Total executed Quantity from premeasuremet Page no. 10								843.65			
									Total Executed Quantity	843.65			
									Tender Quantity	816.48			
									Now To Be Paid Quantity	843.65			
									Quantity Limited To	816.48	110.87	90523.14	
											Sub Total	5335252.19	
											Add 18% Gst	960345.39	
											Total Amount	6295597.58	

10/6/23
ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಜ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

12/06
ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಜ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

Contractor

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಜ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
Assistant Engineer

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಜ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

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